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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,285	03/09/2001	Qicai Shi	CM03333J	5565

24273 7590 08/10/2004

MOTOROLA, INC  
INTELLECTUAL PROPERTY SECTION  
LAW DEPT  
8000 WEST SUNRISE BLVD  
FT LAUDERDAL, FL 33322

EXAMINER

HA, DAC V

ART UNIT	PAPER NUMBER
2634	11

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/803,285

**Applicant(s)**

SHI ET AL.

**Examiner**

Dac V. Ha

**Art Unit**

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-23,29-36 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 9-23,29-36 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8</u> . | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. This office action is in response to the amendment filed on 06/02/04.
2. This application is in condition for allowance except for the following formal matters:

**Claims 9-23, 29-36, 44** are objected to because of the following informalities:

**Claim 9:**

Line 4, "sampling the signal" should be changed to "sampling the first signal".

Line 5, the domain of the recitation "N" should be added (i.e. "the series" should be changed to "the series, where N is an integer,").

Line 5, "the complex conjugate" should be changed to "a complex conjugate".

**Claim 12:**

Lines 1-2, "a dot product" should be changed to "a vector dot product".

Line 7, "the predetermined of places number" should be changed to "the predetermined number of places".

Line 7, "a series" should be changed to "the series" or "said series".

**Claim 15:**

Lines 1-2, "a dot product" should be changed to "a vector dot product".

Line 8, "the predetermined number" should be changed to "the predetermined number of places".

Line 11, "the predetermined number" should be changed to "the predetermined number of places".

**Claim 17:**

Lines 3-4, "direct sequence codes, where N is an integer." should be changed to "direct sequence codes."

**Claim 18:**

Line 5, "the predetermined number" should be changed to "the predetermined number of places".

**Claim 22:**

Line 4, "elements" should be changed to "elements."

**Claim 29:**

Line 5, "the sequence of chip values" should be changed to "the sequence of complex chip values".

Line 5, the domain of the recitation "N" should be added (i.e. "chip values" should be changed to "chip values, where N is an integer,").

Line 6, "the complex conjugate" should be changed to "a complex conjugate".

Line 6, "the sequence of chip values" should be changed to "the sequence of complex chip values".

Line 7, "the Nth" should be changed to "the Nth chip value".

**Claim 31:**

Line 5, "the sequence of chip values" should be changed to "the sequence of complex chip values".

Line 6, "the Nth" should be changed to "the Nth chip value".

**Claim 33:**

Line 4, "information carrying symbols" should be made consistent to language used in claim 29 (i.e. "information conveying symbols").

**Claim 34:**

Line 3, the recitation "a dot product performer" should be differentiated from the previous recited "the dot product performer" (i.e. "a dot product performer" should be changed to "a first dot product performer").

Line 7, "one or more dot product values" should be changed to "the one or more dot product values".

**Claim 35:**

Line 3, the recitation "a dot product performer" should be differentiated from the previous recited "the dot product performer" (i.e. "a dot product performer" should be changed to "a first dot product performer").

Line 5, "one or more dot product values" should be changed to "the one or more dot product values".

Line 7, "in the case" should be changed to "in case".

Line 8, "the threshold" should be changed to "the threshold value".

**Claim 36:**

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Line 3, "the sequence of chip values" should be changed to "the sequence of complex chip values".

Lines 3-4, "the complex conjugate" should be changed to "a complex conjugate".

Line 4, "the sequence of chip values" should be changed to "the sequence of complex chip values".

Line 4, "one" should be change to "the one".

**Claim 44:**

Line 5, the domain of the recitation "N" should be added (i.e. "the series," should be changed to "the series, where N is an integer,").

Line 6, "Nth complex chip value" should be changed to "the Nth complex chip value".

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shi (US 6,728,306) discloses method And Apparatus For Synchronizing A DS-CDMA Receiver.

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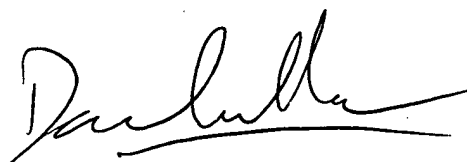
Kim et al. (US 6,570,864) disclose Integrated Receiving Apparatus Of Subtractive Interference Cancellation receiver And Adaptive MMSE Receiver.

Komatsu (US 5,818,882) discloses Frequency Offset Cancellation Apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dac V. Ha', with a horizontal line underneath.

Dac V. Ha  
Examiner  
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